

of the Intermodal Surface Transportation Efficiency Act of 1991 (Pub. L. 102-240, 105 Stat. 1914) and 49 CFR Part 23 regarding disadvantaged business enterprises.

(o) States and their subrecipients shall administer subgrants to universities, hospitals, and other non-profit organizations in accordance with the administrative requirements of OMB Circular A-110 as implemented by the U.S. DOT in 49 CFR Part 19, Uniform Administrative Requirements for Grants and Agreements with Institutions of Higher Education, Hospitals, and Other Non-Profit Organizations.

(p) Reports and other documents prepared under FHWA planning and research funded grants or subgrants awarded after August 22, 1994, must be in metric units.

Subpart B—Research, Development and Technology Transfer Program Management

§ 420.201 Purpose and applicability.

The purpose of this subpart is to implement the provisions of 23 U.S.C. 307 and to prescribe Federal assistance requirements for research, development, and technology transfer (RD&T) activities, programs, and studies undertaken by States with FHWA planning and research funds. The requirements of this subpart and subpart A of this part are applicable to work performed by the States and their subrecipients with FHWA planning and research funds.

§ 420.203 Definitions.

Unless otherwise specified in this part, the definitions in 23 U.S.C. 101(a) and Part 420, subpart A, are applicable to this subpart. As used in this subpart:

Applied research means the study of phenomena relating to a specific known need in connection with the functional characteristics of a system; the primary purpose of this kind of research is to answer a question or solve a problem.

Basic research means the study of phenomena whose specific application has not been identified; the primary purpose of this kind of research is to increase knowledge.

Cooperatively funded study means an RD&T study or activity, administered

by the FHWA, a lead State, or other agency, that is funded by some combination of a State's contribution of FHWA planning and research funds, FHWA administrative contract funds, 100 percent State funds, or funds from other Federal agencies.

Development means the translation of basic or applied research results into prototype materials, devices, techniques, or procedures for the practical solution of a specific problem in transportation.

Final report means a report documenting a completed RD&T study or activity.

Intermodal RD&T means research, development, and technology transfer activities involving more than one mode of transportation including transfer facilities between modes.

National Cooperative Highway Research Program (NCHRP) means the cooperative RD&T program directed toward solving problems of national or regional significance identified by States and the FHWA, and administered by the Transportation Research Board, National Academy of Sciences.

Peer review means a review conducted by persons who are knowledgeable of the management and operation of RD&T programs. This may include but is not limited to representatives of another State, the FHWA, American Association of State Highway and Transportation Officials, Transportation Research Board (TRB), universities or the private sector.

RD&T activity means a basic or applied research, development, or technology transfer project or study.

Research means a systematic controlled inquiry involving analytical and experimental activities which primarily seek to increase the understanding of underlying phenomena. Research can be basic or applied.

Technology transfer means those activities that lead to the adoption of a new technique or product by users and involves dissemination, demonstration, training, and other activities that lead to eventual innovation.

Transportation Research Information Services (TRIS) means the TRB-maintained computerized storage and retrieval system for abstracts of ongoing

and completed RD&T activities, including abstracts of RD&T reports and articles.

§ 420.205 Policy.

(a) It is the FHWA's policy to administer the RD&T program activities utilizing FHWA planning and research funds consistent with the policy specified in § 420.105 and the following general principles in paragraphs (b) through (g) of this section.

(b) State transportation agencies shall provide information necessary for peer reviews.

(c) States are encouraged to develop, establish, and implement an RD&T program, funded with Federal and State resources, that anticipates and addresses transportation concerns before they become critical problems. To promote effective utilization of available resources, States are encouraged to cooperate with other States, the FHWA, and other appropriate agencies to achieve RD&T objectives established at the national level and to develop a technology transfer program to promote and use those results.

(d) States will be allowed the authority and flexibility to manage and direct their RD&T activities as presented in their work programs, and to initiate RD&T activities supported by FHWA planning and research funds, subject to the limitation of Federal funds and to compliance with program conditions set forth in subpart A of this part and § 420.207.

(e) States will have primary responsibility for managing RD&T activities supported with FHWA planning and research funds carried out by other State agencies and organizations and for ensuring that such funds are expended for purposes consistent with this subpart.

(f) Each State shall develop, establish, and implement a management process that ensures effective use of available FHWA planning and research funds for RD&T activities on a state-wide basis. Each State is permitted to tailor its management process to meet State or local needs; however, the process must comply with the minimum requirements and conditions of this subpart.

(g) States are encouraged to make effective use of the FHWA Division, Re-

gional, and Headquarters office expertise in developing and carrying out their RD&T activities. Participation of the FHWA on advisory panels and in program review meetings is encouraged.

§ 420.207 Conditions for grant approval.

(a) As a condition for approval of FHWA planning and research funds for RD&T activities, a State shall implement a program of RD&T activities for planning, design, construction, and maintenance of highways, public transportation, and intermodal transportation systems. Not less than 25 percent of the State's apportioned SPR funds shall be spent on such activities, unless waived by the FHWA, in accordance with the provisions of § 420.107. In addition the State shall develop, establish, and implement a management process that identifies and implements RD&T activities expected to address highest priority transportation issues, and includes:

(1) An interactive process for identification and prioritization of RD&T activities for inclusion in an RD&T work program;

(2) Utilization, to the maximum extent possible, of all FHWA planning and research funds set aside for RD&T activities either internally or for participation in national, regional pooled, or cooperatively funded studies;

(3) Procedures for tracking program activities, schedules, accomplishments, and fiscal commitments;

(4) Support and use of the TRIS database for program development, reporting of active RD&T activities, and input of the final report information;

(5) Procedures to determine the effectiveness of the State's management process in implementing the RD&T program, to determine the utilization of the State's RD&T outputs, and to facilitate peer reviews of its RD&T Program on a periodic basis and;

(6) Procedures for documenting RD&T activities through the preparation of final reports. As a minimum, the documentation shall include the data collected, analyses performed, conclusions, and recommendations.